

**California Regional Water Quality Control Board-Los Angeles Region  
Contracts and Grants Program**

**Project Summary: 05-220-554**

**Project Number:** 05-220-554                      **Project Status:** Active                      **Grant Manager:** M Flores  
**Project Name:** Water Quality Improvements in the Santa Clara River                      **Project on Schedule:** Yes

**Project Details**

**Watershed:** Santa Clara River

**Project Description:** The Project will control the discharge of nutrients and pesticides from farmland to the Santa Clara River. As part of this project, the grantee will construct both bioswales and biotrenches downslope of row and citrus crops in an attempt to experimentally determine the effectiveness of these types of BMPs in an agriculture setting. These BMPs have been tried, tested, and shown to successfully improve water quality in other locations and various urban conditions but limited information currently exists about their use in agricultural settings. The BMPs will filter runoff from the farmland upslope of the Project, which will then be treated to remove nutrients and pesticides before being discharged into the Santa Clara River. Both influent and effluent concentrations of target constituents will be monitored to demonstrate the effectiveness of each treatment method.

**Problem Statement:** This proposal will seek to address the water quality issues in Santa Clara River, providing a demonstration of agricultural Best Management Practices (BMPs) that can serve as an educational tool for the agricultural community in this region.

**Outcomes:** Outcomes of the project are: design, construct, and operate two BMP demonstration projects that will employ bioengineered water treatment technologies contributing to the improvement of water quality in the Santa Clara River, Reach 3, by reducing loading from local agriculture practices, and operate two BMP demonstration projects that will employ bioengineered water treatment technologies.ign, construct, and operate two BMP demonstration projects that will employ bioengineered water treatment technologies contributing to the improvement of water quality in the Santa Clara River, Reach 3, by reducing loading from local agriculture practices, and operate two BMP demonstration projects that will employ bioengineered water treatment technologies.

**Contract**

**Execution Date:** 2/1/06                      **End Date:** 6/30/09

**Contractor**

<b>Contractor Type:</b>		<b>Project Director</b>	<b>Project Assistant</b>
<b>Contractor Name:</b>	Friends of Santa Clara River (Santa Paula)	<b>Name:</b>	Sanger Hedrick
<b>Contractor Department:</b>		<b>Phone Number:</b>	(805) 525-3623
<b>Street Address:</b>	1427 East Main Street P.O. Box 789	<b>Phone Extension:</b>	0                      0
<b>Suite:</b>		<b>Fax Number:</b>	8059331883
<b>City:</b>	Santa Paula	<b>Email Address:</b>	valley.view@verizon.n
<b>State:</b>	CA <b>Zip:</b> 93061-		

**Funding and Invoices**

**Funding Source:** Prop 50

**Fund Summary**

**Project Amount:** \$340,430

**Match Amount:** \$86,000

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	Award	Match
<b>Allocation</b>	\$340,430.00	\$86,000.00
<b>Used</b>	\$0.00	\$0.00
<b>Balance</b>	\$340,430.00	\$86,000.00

**Deliverables**

Line Item	Description	Date		Task Completed
		Due	Receive	
1.1	GIS Monitoring Locations	4/1/06		
1.2	PAEP	4/1/06		
1.3	Monitoring Plan	6/1/06		
1.4	QAPP	6/1/06		
2.1.1	Establish a Technical Advisory Committee (TAC)	4/1/06		
2.1.1.1	List of Names of TAC Members with Affiliation	4/1/06		
2.1.1.2	Agenda/Minutes/Sign in Sheet from Meetings			
2.1.2	Report on Current and Past Agricultural Practices in Lands on Underwood Farm	4/1/06		
2.1.3	Report on Water Volumes and Quality, Pesticides, and Nutrients Anticipated to Enter the Project Sites	4/1/06		
2.1.4	Draft Design for the Systems-- (two [2] bioswales and four [4] biotrenches)	4/1/06		
2.1.5	Final Approved Design Plans for the Bioswales and Biotrenches	4/1/06		
2.1.6	Signed "Letter to Proceed" from SWRCB Grant Manager	4/1/06		
2.2.1	Pre- and Post-Construction Photo Documentation of Bioswale Construction	10/1/06		
2.2.2	Pre- and Post-Construction Photo Documentation of Biotrench Construction	10/1/06		
2.2.3	Pre- and Post-Construction Photo Documentation of Installation of Research Instrumentation	10/1/06		
2.2.4	Results from Startup and Field Testing	11/1/06		
2.3.1	Training Program, Manuals, SOPs	10/1/06		
2.3.2	Training Sign-in Sheets	10/1/06		
2.3.3	Sampling, Measurements, and Analysis Results	12/1/06		
2.3.4	Logs of Periodic Mowing and Discing	12/1/06		
2.4.1	Summary of TAC Review Meetings	10/1/08		
2.4.2	BMP Design Tool and User-Friendly Modeling Program on CD	10/1/09		
2.4.3	Copy of Submittals to Peer-Reviewed Journals and BMP Database (ASCE)	3/1/09		
2.4.4	Cost-Benefit Analysis Report	12/1/08		
2.4.5	Annual Load Reduction Report (crop cycle)	10/1/08		
2.4.6	Public Education/Outreach Materials, Minutes, Sign-in Sheets, Photo Documentation	10/1/08		
2.5.1	Draft Project Report	11/1/08		
2.5.2	Final Project Report	2/1/09		

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**Events**

<b>Date:</b>	5/26/06	<b>Comments:</b>	
<b>Type:</b>	Status report		The first progress report is overdue. An email requesting the progress report has been sent to the PD. We
<b>Subject:</b>	Status		have not received a response.
<b>Status:</b>			

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